Legs testaceous, densely covered with dull whitish linear scales; femora laterally compressed, each with a sharp tooth; tibiae slender, each with a fringe of brownish bristles; tarsi densely setose, hind tarsus with joint 1 somewhat longer than 2, 3rd bilobed and spongy beneath; claws long, curved and connate at base and free towards apex.

Thoracic sterna piceous, punctate, each beset with whitish linear recumbent scale; prosternum canaliculate, canal reaching upto middle of mesosternum and closed behind. Abdominal sternites piceous, closely and compactly punctate, uniformly clothed with whitish scales; sternite 1 longer than 2 and 3 taken together.

Male genitalia with aedeagus tubular, lateral walls thick; aedeagal apodemes as long as aedeagus; endophallus beset with rows of spines, flagellum shorter than each aedeagal apodeme. Phallobase ring-shaped; phallobasic apodeme shorter than each aedeagal apodeme, parameres as long as phallobasic apodeme. Gastral spiculum stout with dilated tip; lateral arms short and weakly sclerotized. Female genitalia with coxites tubular; styli 2 times as long as broad with tip beset with setae. Ventral spiculum straight with tip dilated. Spermatheca with cornu curved; ramus and collum indistinct.

Measurements: *Length* Male body : 4.0 - 4.2 mm : rostrum : 1.1-1.2 mm. Female body: 4.2 - 4.5 mm : rostrum : 1.1-1.3 mm

Breadth: Male body : 2.3 - 2.5 mm : rostrum : 0.5 mm. Female body: 2.4 - 2.6 mm : rostrum : 0.5 mm

Holotype: MALE; INDIA; Punjab, Patiala (Punjabi University, Patiala, near Zoology Department); *Tecomella undulata*; 5. V. 1989; H.S. Rose. Paratypes: Males 3, females 4; same data as for holotype; Males 5, females 6; 12-18. IV. 1990; *Tecomella undulata*: Avtar Kaur. Material deposited in Zoology Department, Punjab University, Chandigarh.

ACKNOWLEDGEMENTS

We thank USDA for financing two 5-year projects under which this work was done. The laboratory facilities provided by the Chairman of Zoology Department, are also gratefully acknowledged.

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COPIDOGNATHUS EBLINGI, A NEW SPECIES OF HALACARIDAE (ACARI) FROM ANDAMAN ISLANDS (INDIAN OCEAN)[1]

TAPAS CHATTERJEE[2]

(With eleven text-figures)

A new halacarid species, *Copidognathus eblingi*, collected among the thalli of *Acetabularia* sp. in the intertidal region of Ross Island (Andaman Islands), Bay of Bengal, is described. Its similarities and dissimilarities with the related species of the genus are discussed.

INTRODUCTION

Taxonomic researches on the marine mites of the Indian coast mention a few species names in the classified faunal lists prepared for meiofaunal ecology studies (Rao 1969, 1972, 1980, Rao and Ganapati 1968, Rao and Misra 1983 a,b). The only biosystematic study of Halacaridae from the Indian coast is that of Rao (1970) from the interstitial sands of Visakhapatnam coast. Recently Sarma and Chatterjee (in press) reported the occurrence of *Copidognathus hartwigi* and *Atelopsalis pacifica* for the first time from Indian seas. The present paper describes a new species of the genus *Copidognathus*, *C. eblingi* collected among the thalli of *Acetabularia* sp. in

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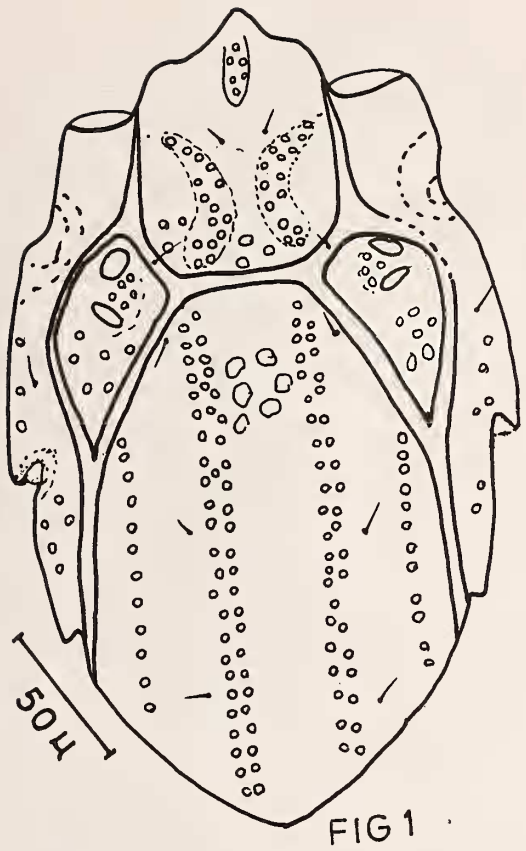
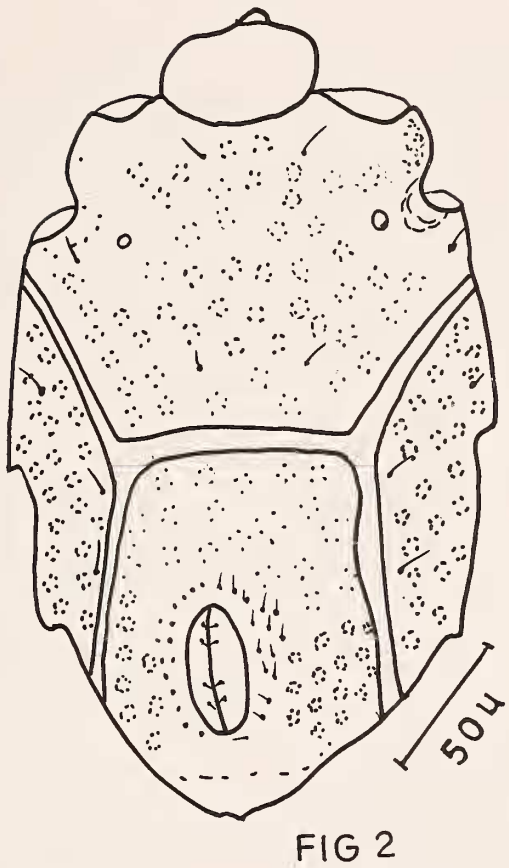


FIG 1



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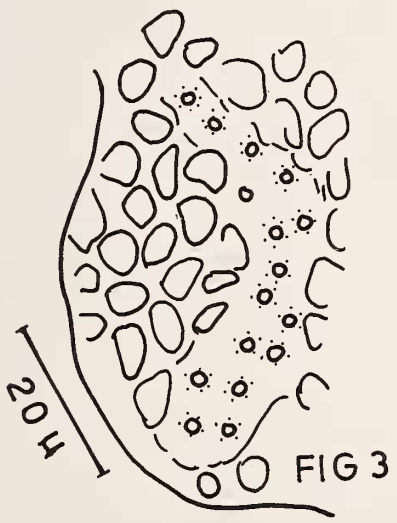

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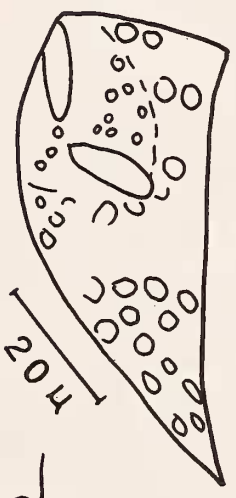

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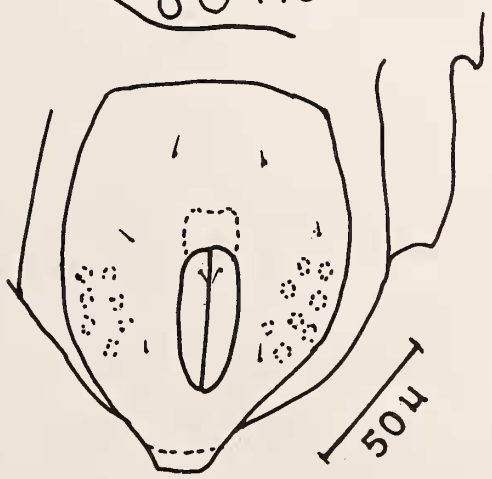

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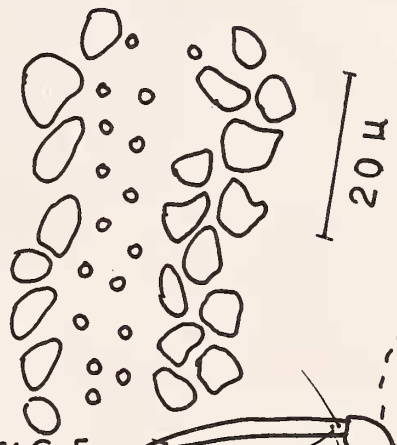


FIG 5

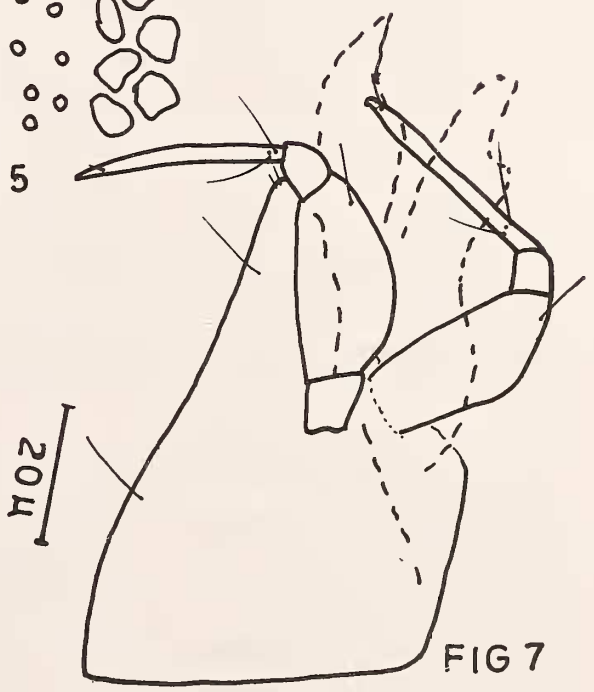


FIG 7

Figs. 1-7. *Copidognathus eblingi* sp. nov.
1. Idiosoma dorsal (male), 2. Idiosoma ventral (male), 3. Magnified view of posterior areola of AD, 4. OC showing corneae, areolae and foveae, 5. Magnified portion of the middle costae of PD, 6. GA of female, 7. Gnathosoma. For abbreviations see text.

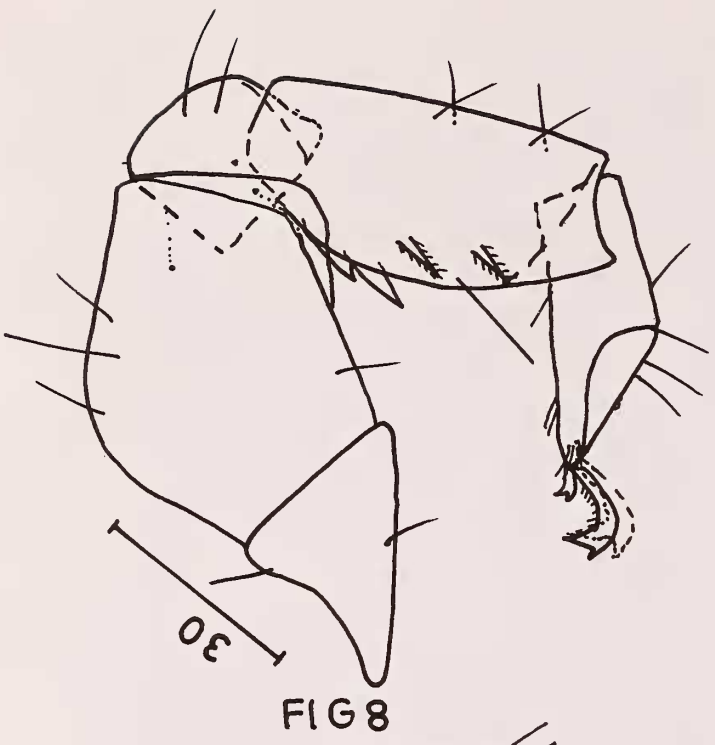
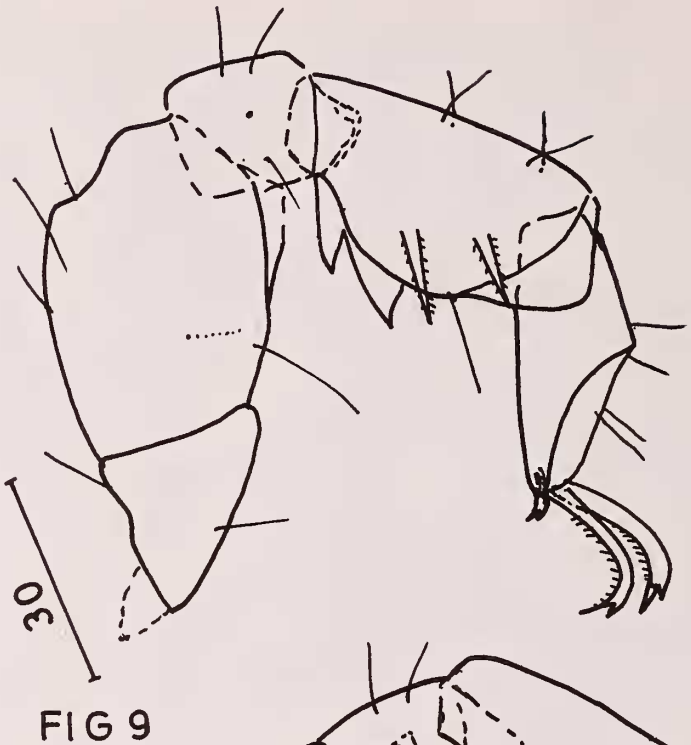


FIG 8



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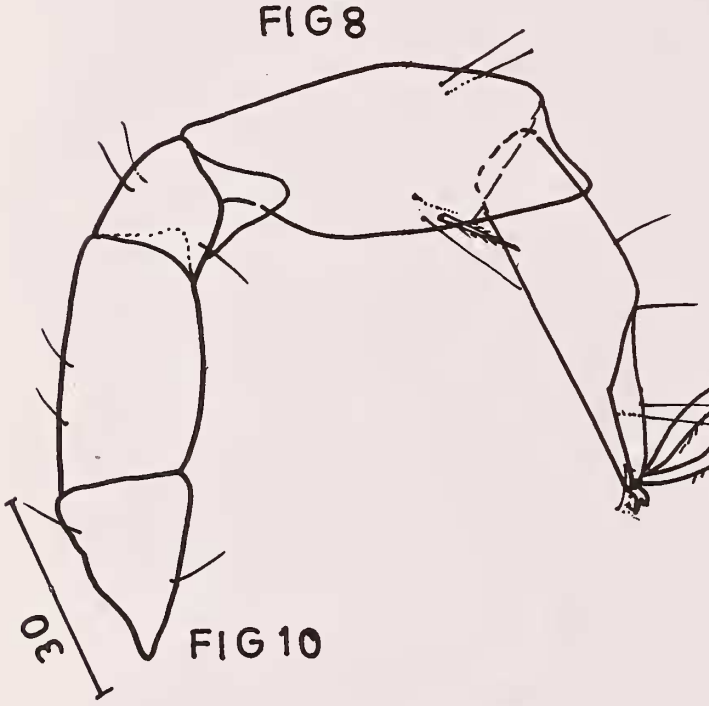

FIG 10

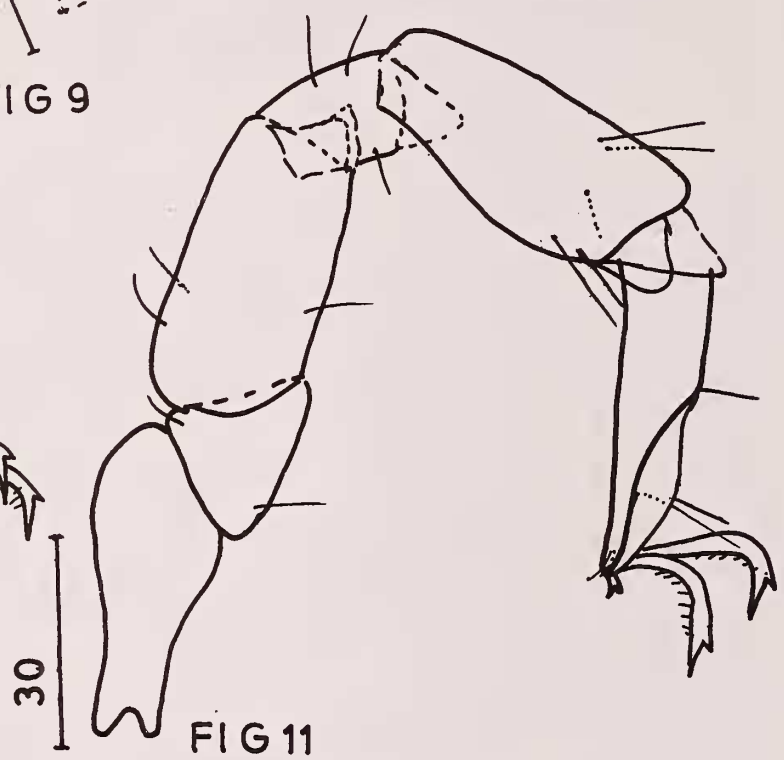

FIG 11

Figs. 8-11. *Copidognathus eblingi* sp. nov.
8. Leg I (Basifemur-tarsus), 9. Leg II (Basifemur -tarsus), 10. Leg III (Basifemur-tarsus), 11. Leg IV.

the intertidal region of Ross Is. (Andamans), Bay of Bengal.

Material and Methods

The foreshore algal samples were collected and fixed in 70% alcohol in the field and brought to the laboratory. The halacarids were separated in the laboratory from the algal thalli and preserved in 70% alcohol for specific determination. Later the specimens were treated with lactic acid and rinsed in alcohol in cavity slides. The dissected specimens were mounted in glycerine jelly and sealed.

Copidognathus eblingi sp. nov.[3]

Classification adopted here is that of Krantz (1978) and Bartsch (1983).

Locality: Several male and female specimens were collected from the algal samples of *Acetabularia* sp. from Ross Is. (Andaman Islands), Bay of Bengal.

Type: Holotype (Male) and other type material are in the author's collection in the Dept. of Life Sc., R.C.E., Bhubaneswar.

[3]Named after Prof. (Dr) F.J.G. Ebling, Emeritus Professor of Zoology, University of Sheffield, England, for his pioneering researches on phytal fauna.

Descriptions

Male: The idiosomal length of males ranged between 260 μ and 295 μ. All dorsal plates are separate and coarsely sculptured with both areolae and fovea (Fig. 1). AD (Anterodorsal plate) with three areolae, one located anteriorly and two crescent- shaped posteriorly (Fig. 3). Dorsal seta 1 (ds_1) present anterior to the posterior areolae. Dorsal seta 2 (ds_2) present between AD and ocular plate (OC), just above the anterior margin of OC. Membranous cuticle (mc) between AD and PD (posterodorsal plate) bears parallel striae. OC with two distinct corneae and a few pores between the corneae and fovea on the rest of the OC (Fig. 4). The OC tapers posteriorly, extending up to the insertion of legs III. PD with 4 costae. The two middle costae are two pores wide (Fig. 5) and the paracostae 1-2 pore wide. The ds_3, ds_4, ds_5 (dorsal setae 3,4 and 5 respectively) are on PD between middle and lateral costae placed at anterior, middle and posterior reaches of PD respectively (Fig. 1).

All ventral plates are separate, 1st and 2nd coxal prominences of anterior epimeral plate (AE) bear small areolae on the lateral margins while rest of AE is sculptured with porose panels. AE with 3 pairs of setae. Posterior epimeral plate (PE) bears 3 ventral and one dorsal setae besides two areolae ventrally. Genitoanal plate (GA) with paragenital areolae and panels. 26-38 perigenital setae (PGS) are present around the Genitoanal opening (GO). Four pairs of subgenital setae (SGS) two pairs anteriorly and two pairs posteriorly are present on the GO (Fig. 2).

A pair of proto-, deuto-, trito-, and basirostral setae are present on the gnathosoma. Dorsally the gnathosoma is sculptured with foveae, ventrolaterally with porose panels and ventromedially with canaliculi. Palp 4-segmented. Palpal trochanter and patella without any setae. Palpal tibiotarsus bears 3 basal setae and one singlet distal eupathidia (Fig. 7). The chaetotaxy of legs is as follows:

Trochanter 1, 1, 1, 0 Basifemur 2,2,2,2. Telofemur 5,5,2,3. Patella 4,4,3,3. Tibia 7,7,5,5.

Chaetotaxy of tarsus is discussed in the text.

Trochanter III clavate and devoid of any posterodorsal spine. Telofemorae III bear no ventral setae while IV are with one ventral seta.

Telofemorae, patella and tibiae of legs III and IV have conspicuously elongated distal lamellae (Figs. 10, 11). Telofemorae, patella and tibiae of legs I and II have relatively shorter lamellae than those of III and IV legs.

Tibiae I and II basally bear a pair of denticulous processes ventrally (Figs. 8, 9). Tibiae I and II bear 4 dorsal and 3 ventral setae (two are pectinate and one is smooth, slender and hair-like) respectively.

Tarsus I bears three ventral setae (one filiform seta and two distal eupathidia, three dorsal setae, one solenidion, one profamulus distal to solenidion and 4 parambulacrel setae (PAS) (2 doublets eupathidia). Tarsus II bears 3 dorsal fossary setae, one solenidion, no ventral setae and 4 PAS (two eupathidia doublets). Tarsi III and IV with three dorsal fossary setae and two PAS besides the presence of a proximodorsal seta on tarsus III (Figs. 10, 11).

All legs have well developed claw fossae, two lateral claws and a bidentate median claw. Lateral claws are pectinate ventrally and possess an accessory tooth dorsally.

Female: The length of idiosoma ranges between 270 μ and 304 μ.

The female is similar to the male except for the genitoanal plate. Three perigenital setae are present on each side of the GO. The GO is guarded by a pair of sclerites equipped with a single pair of SGS near the anterior end. Ovipositor short (Fig. 6).

Larvae and nymphs were not found in the samples collected.

Discussion

C. eblingi resembles the members of the key groups 6600 and 7300 which are the extensions of the main key group 5000 (Newell 1984). It is observed that basically the main key group of Newell suffers due to the inadequacies in the scheme as there is no provision to accommodate the widely varying traits of the vastly different and heterogenous species of the extension groups. There are, in all, five species in the extension key group mentioned above. Three of which (namely, *C. curtus* Hall 1912, *C. lunatus* Newell 1984, and *C. semilunatus* Newell 1984) belong to the extension key group 6600 and two species (namely, *C. pectinatus* Newell 1984 and *C. prolixus* Newell 1984) to the extension key group 7300. The two extension key groups mainly differ in that the key group 6600 has

Ds_3 on mc and mc quite rugose or slightly rugose while in 7300 Ds_3 is on PD and mc bears parallel striae. *C. semilunatus* belonging to the group 6600 bears Ds_3 on PD and parallel striae on mc. Thus the distinction envisaged becomes too fragile. By and large, the pliability, plasticity and variability of the traits selected render the key grouping defunct.

The present species differs from the other five species in the presence of a ventral denticulous process at the base of tibiae I and II.

The presence of two crescent-shaped posterior areolae, ds_2 on mc, ds_3 on PD, 4 costae on PD and tibiae I-II with denticulous process bring the present species nearer to *C. dentatus* Viets 1940. *C. eblingi* sp. nov. differs from *C. dentatus* by the presence of long distal lamellae on telofemorae, patella and tibiae of all legs which are absent in *C. dentatus*. Further, telofemorae III and IV of *C. eblingi* sp. nov. have 0 : 1 ventral setae, where as in *C. dentatus* telofemorae III and IV have 1:1 ventral setae.

ACKNOWLEDGEMENTS

Thanks are due to Dr. A.L.N. Sarma, Incharge of Zoology Divn., R.C.E., Bhubaneswar for critically going through the manuscript and constant guidance, to Dr. Ilse Bartsch, Biologische Anstalt Helgoland, Hamburg (FRG) for readily providing necessary literature and helpful suggestion.

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A NEW SPECIES OF *ERYX* (BOIDAE: SERPENTES: SQUAMATA) FROM SOUTH-WESTERN INDIA[1]

INDRANEIL DAS[2]

(With three text-figures)

The occurrence of two species of erycine snakes (sand boas), *Eryx conicus* (Schneider, 1801) and *Eryx johnii* (Russell, 1801) in India is documented in the treatises of Gunther (1864), Boulenger (1890, 1893) and Smith (1943), as well as in more recent works on the group. A third taxonomically cryptic erycine from south-western India, whose identity had apparently gone unnoticed, had aroused our suspicion for a long time. Misidentified by earlier workers as *Eryx conicus* or a *Eryx conicus* X *E. johnii* hybrid, morphological observations on a series demonstrates it as a hitherto undescribed species, described here as:

[1]Accepted October 1990.

[2]Madras Crocodile Bank Trust, Vadanemmeli, Perur Post, Mahabalipuram Road, Madras 603 104, Tamil Nadu.